
Communications Services

Communications Services include the Communications Supervisor and its Communications Servers, the Data Supervisor and its Data Servers, and any calling communications module such as: MAT Terminal Emulation and the Station Administration MATComm module. When a MAT module requests a communications session with the Meridian 1, it uses either the Communications Supervisor or Data Supervisor which initiates its supporting Servers to make the connection to the Meridian 1. The Servers establish a link to the Meridian 1 and allow the module to perform communications with the Meridian 1. This can include such activities as retrieving and sending Meridian 1 configuration information, collecting traffic data, and updating the Meridian 1 database.

Note: The Communications and Data Supervisors and Communications and Data Servers function similarly by communicating with the Meridian 1. The Communications Supervisor and its Communications Server link to the MAT Call Accounting and Call Tracking modules, whereas the Data Supervisor and its Data Server link to MAT Station Administration and Traffic modules. For simplification purposes, this manual will refer to all Communications Services by the terms “Communications Supervisor” and “Communications Server”.

By performing traffic data retrieval and buffering, Communication Services provide the Meridian Administration Tools system with its primary source of traffic data. These services initiate a connection to a Meridian 1 switch and collect traffic data from it or its buffer device. To ensure that the data is promptly collected and stored for further processing, you can set up traffic data collection to run on regularly scheduled intervals.

Overview

When the MAT system requires a communications function (such as collecting call records from the Meridian 1), it sends the request to the Communications Supervisor. The Supervisor, in turn, sends appropriate commands to a Communications Server. The Server establishes the actual connection and initiates communications with the external source. Each time a Communications Server is requested, the Communications Supervisor creates another Server responsible for control of the requested communications.

To access the Communications Supervisor, double-click on its icon. The Communications Supervisor window opens, from which you can perform all communications functions.

Remember that once you activate the Communications Supervisor, it remains active. When you attempt to close it, it will appear in minimized mode. If you are running any applications or connections which have a time delay, the Supervisor will be able to execute the command which runs the application.

The Communications Server is a separate module which the Supervisor uses to communicate with the external source (that is, the Meridian 1). The Supervisor can dispatch multiple commands to different Servers. This allows you to communicate with different sources at the same time. You will not interface with the Communications Server directly. The Supervisor issues all of your commands to the appropriate Server.

Figure 42 illustrates the relationship between the Communications Supervisor, its Servers and any applications that access the Supervisor. Multiple applications use the single Communications Supervisor to access multiple Communications Servers. Each Server has a separate script file for connection to each Meridian 1 switch.

Accessing the Communications Supervisor

When you first access the Communications Supervisor, its window appears as shown in Figure 43. You use its menus to perform such functions as setting up the communications database, activating the Communications Server Dispatcher, and monitoring the data received from the Meridian 1.

Figure 42
Communications Supervisor schematic

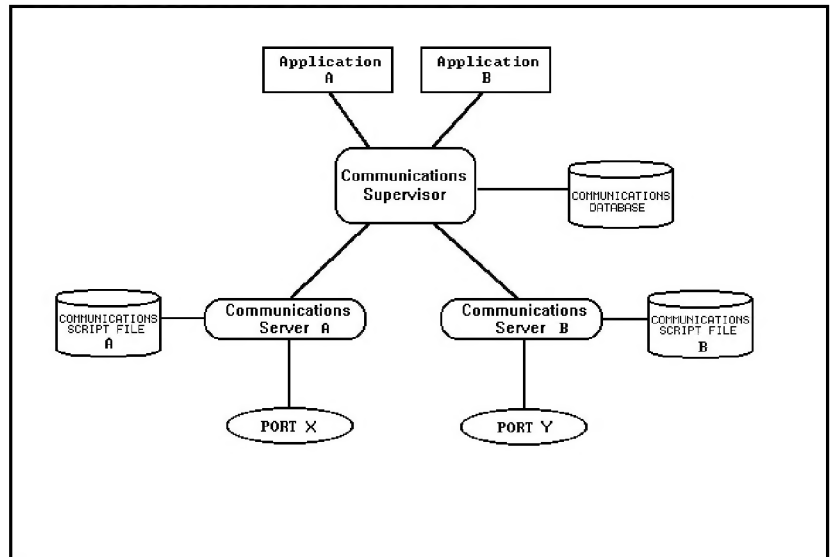
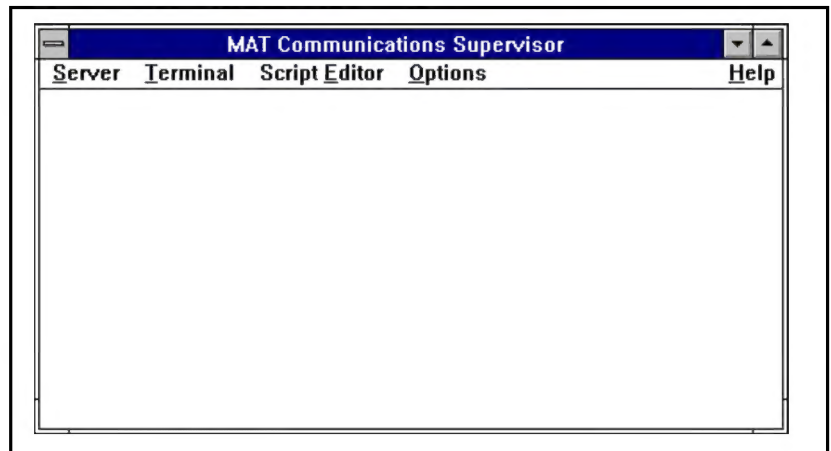


Figure 43
Communications Supervisor window



Server

The Communications Server is a separate function module which the Communications Supervisor uses to connect the PC to an external source (the Meridian 1) through the communications port. You can access multiple Servers from the Supervisor to run the various connections. The Servers execute the commands sent by the Supervisor.

Communications Servers collect data from a source such as a Meridian 1 or buffer unit, preprocess the data, and save it as a traffic data dump file in the current site's directory. The file, named TRAFFIC.DMP, is available for processing by the Traffic Analysis Module. The Communications Servers are also used to establish communications connections between the PC and the Meridian 1. Messages sent from the PC to the Meridian 1 for station updates and retrievals are performed through the Communications Servers.

Change Path

The Communications Supervisor uses its own installed drive and path name (C:\MAT) as the default drive and path name for its Communications Servers. To change the path for the Communications Servers, select **Change Path** from the Server menu. Enter the new path name in the Path field and click on **OK**.

Status

Select **Status** from the **Server** menu to view the status of the Communications Servers. The list displays active Servers and the applications for which they are maintaining communications.

Ports

Select Ports from the Server menu to list the currently available ports. These are serial I/O ports on your PC that are present and not in use by an application (for example, ports 1, 2, 3, or 4).

Supervisor Purge

Select Supervisor Purge to disconnect the Communications Supervisor from the applications and Servers to which it is connected. This re-initializes the Supervisor to clear its current activities.

Note: This option is not part of the normal use of the Communications Supervisor and is provided as an operational recovery tool only. Use this menu selection if the Windows environment becomes unstable (perhaps due to an application error and subsequent abnormal termination).

The system warns you that the internal tables will be reset. Click on **OK** to continue. You can then purge the Supervisor's activities or exit without performing the purge.

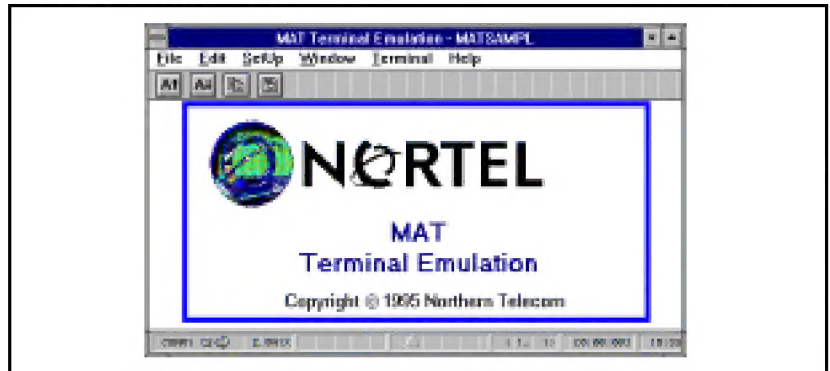
WARNING

Purging the Communications Supervisor internal tables aborts ALL currently active communications sessions.

Terminal Emulation

Use Terminal Emulation to connect your PC to an external source and communicate with it through a serial port without using a script file. To access Terminal Emulation, select Terminal from the Communications Supervisor window. The Terminal Emulation window appears.

Figure 44
Terminal Emulation window



Refer to “Terminal Emulation” on page 83 for complete instructions on using this facility.

Script Editor

Scripts are ASCII files containing the set of instructions that the Communications Server performs to carry out communications requests. You can use any text file editor to edit these files. The Script Editor menu accesses the Microsoft Windows Notepad editor.

To access the Notepad editor, select Script **Editor** in the Communications Supervisor window. The Open window appears, showing a list of existing script files (each with a file extension of .SCR). Use Notepad's functions to create, edit, and manipulate script files. Remember to save a script file with the extension.SCR, so the Communications Supervisor can recognize it as a script file.

For more information on the Windows Notepad program, please refer to the Microsoft Windows User's Guide.

Options

The selections in the Options menu helps you to monitor the activities of Communications Servers.

Monitor

To monitor all of the Communication Supervisor's and Servers' activities, select **Monitor**. Messages appear in the Communication Supervisor's window reflecting these activities. The check mark that appears in the menu beside Monitor indicates that the function is active. Click on **Monitor** a second time to deactivate the function.

Pause

To temporarily stop the display of monitoring messages, select **Pause**. The check mark indicates that the message display is stopped. This does not stop communications activities, only the display of related messages. Click on **Pause** again to resume monitoring.

Data Traffic

Select **Data Traffic** to learn when data passes through the Communications Supervisor between an application and a server. The Supervisor displays the window identifier of the application (an integer number representing a Server or another product) from which it received data, and the word *wm_DDE_Data*. This word indicates that the specified application is passing data. The Supervisor also displays the window identifier of the application receiving the data.

Click on **Data Traffic** again to turn off data traffic monitoring.

Log Events

Select **Log Events** to log all Communications Supervisor interactions to the MAT History File database. As a module or application communicates with the Communications Supervisor, information about the interaction is time- and date-stamped and written to the log. You can later access the MAT History File to view, save, or print this information.

If a problem occurs involving the Supervisor executing a communications request, these log files contain detailed information on what occurred.

Click again on **Log Events** to turn this feature off.

Note: You can delete log files when you no longer need them. Since the files become quite large over time, you should monitor their size and delete them when you need to make better use of disk space.